

THE UNITED REPUBLIC OF TANZANIA
NATIONAL EXAMINATIONS COUNCIL
CERTIFICATE OF SECONDARY EDUCATION EXAMINATION

013

GEOGRAPHY

(For Both School and Private Candidates)

Time: 3 Hours

06 November 2002 p.m.

Instructions

1. This paper consists of sections A, B, C and D.
2. Answer ALL questions in sections A, B and C and ONE (1) question from each part of section D.
3. Map extract of Nansio sheet 22/I is provided.
4. Credit will be given for use of relevant sketch maps and diagrams.
5. All answers must be written in the answer booklet(s) provided.
6. Cellular phones are not allowed in the examination room.
7. Electronic calculators are not allowed in the examination room.
8. Write your Examination Number on every page of your answer booklet(s).

This paper consists of 7 printed pages.

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SECTION A (20 marks)

PHYSICAL AND MATHEMATICAL GEOGRAPHY

1. For each of the items (i) - (x) choose the correct answer from among the given alternatives and write its letter beside the item number.

(i) Due to spinning effect of the earth, water and air currents do not travel in straight lines. The term used to describe this situation is

- A deflation
- B reflection
- C deflection
- D direction
- E abrasion.

(ii) Which of the following is the proper arrangement of the first five planets of the solar system according to the distance from the sun starting with the nearest planet?

- A Mercury, Earth, Venus, Saturn and Mars
- B Mercury, Venus, Earth, Mars and Jupiter
- C Venus, Mercury, Mars, Earth and Uranus
- D Mars, Earth, Mercury, Jupiter and Venus
- E Mercury, Jupiter, Earth, Venus and Uranus.

(iii) If the time at place X 45° E is 10:00 a.m. what will the time be at place Y, 45° W?

- A 6:00 a.m. B 10:00 p.m. C 4:00 p.m. D 4:00 a.m. E 10:00 a.m.

(iv) Which feature forms a natural barrier to floods?

- A Levêê B Dam C Rapid D Waterfall E Delta.

(v) Medial Moraines occur in mountain regions where

- A several cirques meet to form a sharp peak
- B two glacier valleys become one and lateral moraine unite
- C an arête is lowered by frost and thaw
- D alluvial fans are formed
- E glaciation takes place

(vi) An earthquake begins

- A along a fault or a fissure B at the inner core of the earth C at the epicenter
D at the focus E from the mantle layer.

(vii) Which of the following features are produced by water action in desert areas?

- A Yardangs and Playas
- B Sand dunes and Canyons
- C Alluvial fans and Zeugens
- D Canyons and Playas
- E Alluvial fans and Sand dunes.

(viii) Which one of the following is **not** true of sedimentary rocks?

- A They are usually in layers
- B They have been changed by heat and pressure
- C Some contain important minerals
- D Some are wind deposited
- E They are organically, chemically or mechanically formed.

(ix) Soils with clearly distinguishable horizons which occur in definite regions of climate and vegetation are known as

- A intrazonal soil B clay soil C zonal soil D azonal soil E desert soil.

(x) The following is a coastline which exhibits drowned hills and valleys parallel to the Sea or ocean:

- A Upland coast B Ria coast C Fjord D Dalmatian E Lowland coast.

2. Match the items in List A with the responses in List B by writing the letter of the correct response beside the item number.

LIST A

- (i) Inter-Tropical Convergence Zone (ITCZ)
- (ii) Angular distance East or West of the Prime Meridian
- (iii) An extensive elevated region with gentle undulating surface with uniform summit level
- (iv) The break of rocks by alternate freezing and thawing of water at the bottom of cracks in the glaciated land
- (v) Feature formed at the mature stage of the river
- (vi) A long, slender and needle-like calcite rock hangs downward from the roof of a limestone cave

- (vii) The zone separating two air masses
- (viii) Stony desert
- (ix) Typical plants of hot desert area
- (x) The upper limit of saturation in a saturated rock

LIST B

- | | | | |
|---|-----------------|---|--|
| A | Stalactite | L | Bluff |
| B | Front | M | Time zone |
| C | Cacti | N | Water table |
| D | Stalagmite | O | A plateau |
| E | Deflation | P | Interlocking spurs |
| F | Mangrove swamps | Q | Longitude |
| G | Reg | R | Water vapour |
| H | A mountain | S | The zone between the maritime and continental air masses |
| I | Sapping | T | A spring |
| J | Erg | | |
| K | A well | | |

SECTION B (20 marks)

STATISTICS, RESEARCH TECHNIQUES AND SIMPLE SURVEYING AND LEVELLING

3. (a) Use the following data to draw a group bar graph:

Contribution of Agriculture to the Gross Domestic Product (GDP) in East Africa (in Percentage)

YEAR	TANZANIA	KENYA	UGANDA
1954	64	47	67
1958	59	42	64
1960	61	40	61
1965	54	38	59

- (b) Give a brief comment on the contribution of agriculture to the GDP in East Africa.

(c) Study the data below and answer the questions that follow.

CLASS	FREQUENCY
20 - 24	7
25 - 29	10
30 - 34	13
35 - 39	6
40 - 44	4
45 - 49	3
50 - 54	6
55 - 59	7
60 - 64	4

- (i) What is the interval of the class?
 - (ii) Calculate the mean
 - (iii) Find the mode of the data.
4. (a) What are the objectives of field research?
- (b) Briefly explain the following:
- (i) Primary data in research
 - (ii) Interview as a method of data collection.
5. (a) What is triangulation in surveying?
- (b) Explain the advantages of planetable survey.

SECTION C (30 marks)

MAP READING AND PHOTOGRAPH INTERPRETION

6. Study carefully the map extract of NANSIO sheet 22/1 provided, then answer the following questions:
- (a) Find the width of Rugezi Channel from Rugezi Point to Kisorya Point. Give your answer in kilometres
 - (b) What factors may have contributed to the growth of Nansio township?
 - (c) Calculate the area of dry land east of Rugezi channel. Give your answer in square kilometres
 - (d) Determine the bearing of Kabasieka Island from Higongo Island grid 190670
 - (e) Apart from contour lines, what other method has been used to show the relief of the area shown in the map? What is the highest point shown by this method?

7. Study carefully the photograph provided below and then answer the questions that follow.
- Give the necessary conditions for the growth of the crop shown on the photograph.
 - What activity is taking place in the photograph?
 - Suggest a possible area in northern Tanzania where this photograph might have been taken.



SECTION D (30 marks)

Answer ONE (1) question from each part.

PART 1

REGIONAL FOCAL STUDIES

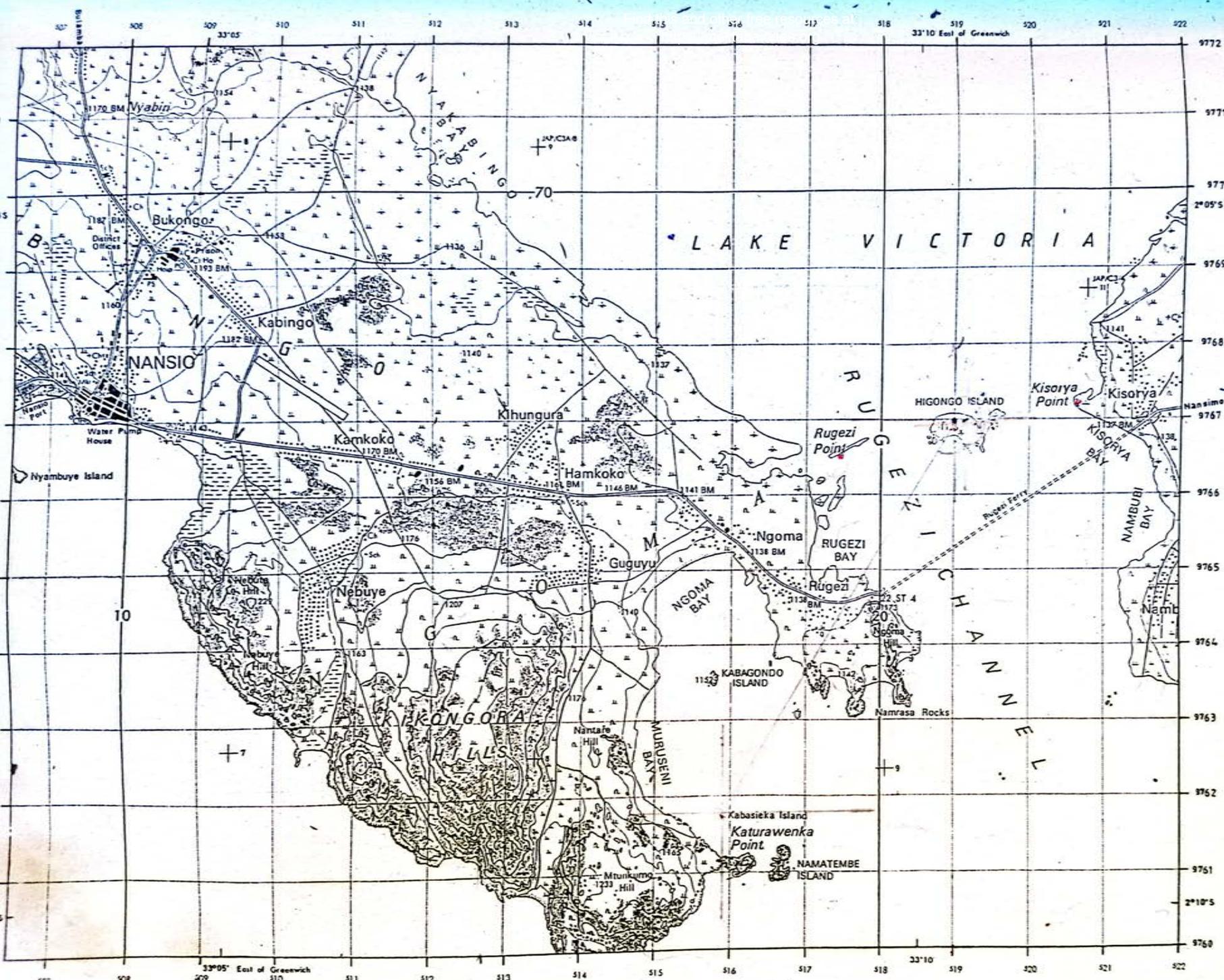
- Discuss the problems facing the forestry industry in the developing countries.
- Explain the problems facing the wheat growing provinces of Canada.
 - What changes are now being encouraged in the Prairies Province of Canada?

PART II

POPULATION SETTLEMENTS AND ENVIRONMENTAL ISSUES AND MANAGEMENT

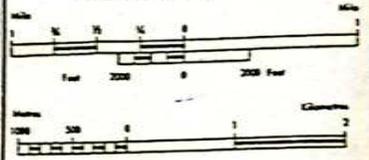
10. Explain the influence of population on human and natural resources in East Africa.
11. (a) Define migration.
(b) Examine briefly the main factors which cause the different types of internal migration

NANSIO



- Built-up Areas
- Villages
- Huts
- All Weather Roads - Bound Surface 23 Milestone
- " " " Loose Surface
- Dry Weather Roads
- Main Tracks Motorable
- Other Tracks and Footpaths
- Railways Station, Siding, Level Crossing
- " " " Light
- Airfield Runways - Grass
- Telephone Line
- Power Transmission Line
- Heights in Meters (Ground Level) 1024
- Air Photo Principal Point with Sighting No.
- Mosque, Church
- Contours (V.L. 20m) Depression
- Forest
- Thicket
- Bamboo
- Plantation: C (Coffee) S (Sisal) S (Sugar) Pa (Palm) T (Tea)
- W (Wattle) W (Cashew) N (Nut) C (Cocoa)
- Woodland
- Scrub
- Scattered Trees
- Palm
- Mangrove Swamp
- Tree Swamp
- Papyrus Swamp Marsh Bog
- Seasonal Swamp

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